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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,690

04/16/2004

Mitsugi Chonan

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EXAMINER

PILKINGTON, JAMES

ART UNIT

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3682

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,690	<b>Applicant(s)</b> CHONAN, MITSUGI	
	<b>Examiner</b> JAMES PILKINGTON	<b>Art Unit</b> 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-12 and 14-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12 and 14-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
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| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)                |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application      |
| Paper No(s)/Mail Date _____  | 6) <input checked="" type="checkbox"/> Other: <u>Figures A&amp;B</u> . |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "case defined portion" (clm 1) and the shroud wall completely covers over the outermost end of said fan blade (clm 27 and 29) must be shown or the feature(s) canceled from the claim(s). Is this the area where the shroud wall merges with the casing? No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1, 27 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re clm 1, it is not clear what the Applicant is attempting to claim by the phrase “a case defined portion.” It is believed that the Applicant is attempting to claim the area where the shroud wall merges with the case wall. If this is the case the Applicant should explicitly claim this feature by saying, for example, the shroud wall becomes one with the case at a merging point.

Re clm 27 and 29, it is not clear what the Applicant means by the shroud wall completely covering over the outermost end of the fan blade. If the shroud wall completely covers the fan blade how is air moved around the casing? Figure 5 of the instant applicant shows that the shroud wall only covers a portion of the fan blade since it stops at a central portion of the pulley/fan blade.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 10-12 and 14-20, as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Ikenoya, USP 4,493,677.

Re clm 1-8, 10-12 and 14-20, Ikenoya discloses a continuously variable transmission comprising:

- A primary pulley (8)
- A secondary pulley (10)
- A drive belt (11)
- A fan blade (44)
- A case (Figures 2 and 3)
- A shroud wall (dashed line under 48 and 46 see figure A attached) arranged independently from an inner surface of the casing, and the shroud wall has a base (see figure A attached) and free end (see figure A attached) and near the intake region (45)
- A scrolling surface/flow channeling surface (inside surface of casing)
- A clearance gradually increasing over a quarter of said one of the pulleys (see Figure 2, pulley 16)
- Wherein said shroud wall is positioned as to cover the outermost end of the fan blade
- A case defined portion (where shroud wall contacts casing, see figure A attached)

- An intake port/intake region (45, moves the air from the chamber A to pulley chamber B), wherein said intake region is positioned such that air exiting the intake port is directed laterally into contact with one of the pulleys at a region located between radial interior and exterior edges of the fan blade (the air comes laterally to a center region of the pulley)
- Wherein the shroud wall is arranged near the intake port (45)
- An exhaust port/discharge region (open area around pulley 10 that allows air to travel from Chamber B to Chamber A).
- a unidirectional airflow plate (48) provided in said case and attached to the scrolling surface
- wherein said shroud wall and case represent a combination that is monolithic (combined together into one part)
- wherein an interior surface of said case extends to opposite sides of said shroud wall so as to have said shroud wall increase an amount of scroll surface conformance to a rotation travel path of an outer surface of said one of the pulleys (see Figure 2)
- wherein said shroud wall has a curvature which follows along a region of said one of the pulleys (8) which region includes a first sub-region where in said pulley is in contact with the belt (shroud wall to the left of intersection point with belt) and a second sub-region wherein said pulley is free of contact with said belt (where shroud wall intersects with belt in Figure 2)

- wherein a free end of the shroud wall is located in a region of minimum spacing between the pulleys (see Figure B attached)
- wherein the shroud wall extends inward relative to an interior surface portion of said case from which the wall extends (see Figure A attached)
- wherein the scrolling surface on said shroud wall and said case is continually formed (continually formed in region A, see Figure A attached)
- wherein the shroud wall is positioned as to completely cover over said outermost end of said fan blade
- wherein said shroud wall extends circumferentially about said pulley as to have a free end that falls internally between said pulleys and inward of said loop path of said drive belt (the loop path is defined by the outer surface of the belt, the wall extends inside this part of the loop)

### ***Response to Arguments***

6. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection since Ikenoya is being applied differently.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. P./

Examiner, Art Unit 3682

1/18/08

/Richard Ridley/

Supervisory Patent Examiner, Art Unit 3682